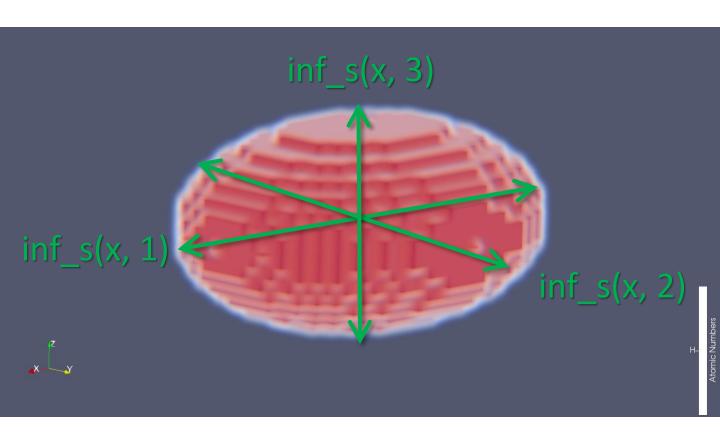
$typ_s(x) = 'ellipsoid'$

inf_s(x, 1): Diameter along x-axis.

inf_s(x, 2): Diameter along y-axis.

 $\inf_{x}(x, 3)$: Diameter along z-axis.



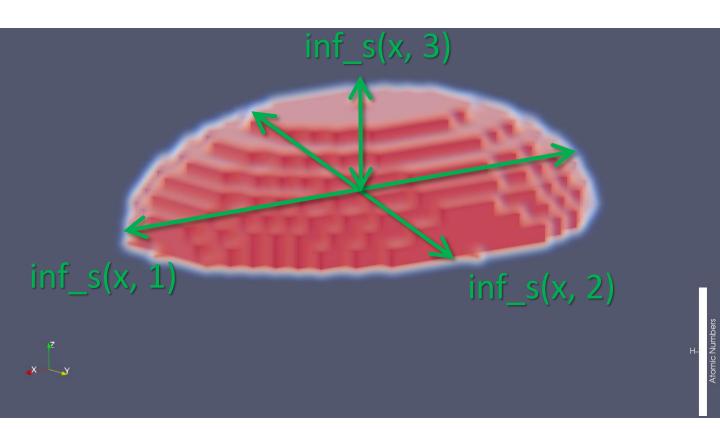
The origin is located on the center of the shape.

typ_s(x) = 'half-ellipsoid'

inf_s(x, 1): Diameter along x-axis.

inf_s(x, 2): Diameter along y-axis.

inf_s(x, 3): Height(=radius) along z-axis.



The origin along the z axis located below the shape.

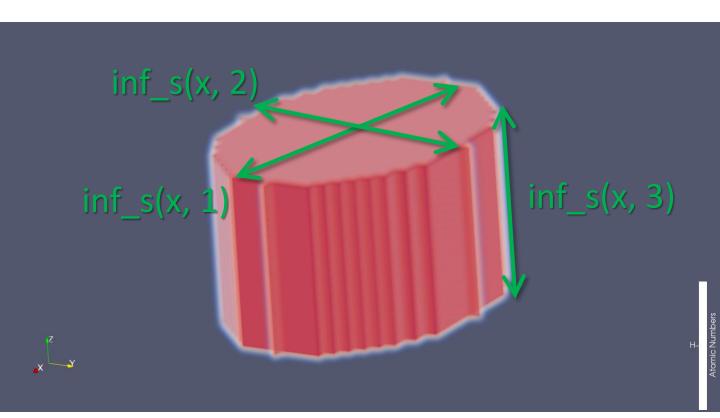
(The origin on the xy-plane is located on the center of the ellipsoid)

typ_s(x) = 'elliptic-cylinder'

inf_s(x, 1): Diameter along x-axis.

inf_s(x, 2): Diameter along y-axis.

 $\inf_{x} s(x, 3) : Side length along z-axis.$



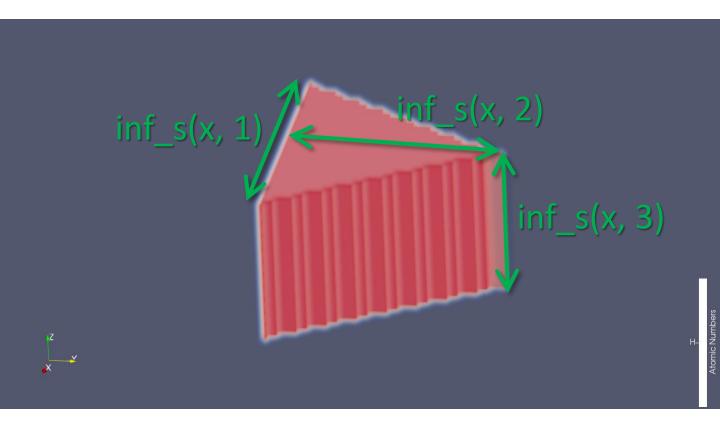
The origin is located on the center of the shape.

typ_s(x) = 'triangular-cylinder'

inf_s(x, 1): Side length along x-axis.

inf_s(x, 2): Height along y-axis.

 $\inf_{x \in S} (x, 3) : Side length along z-axis.$



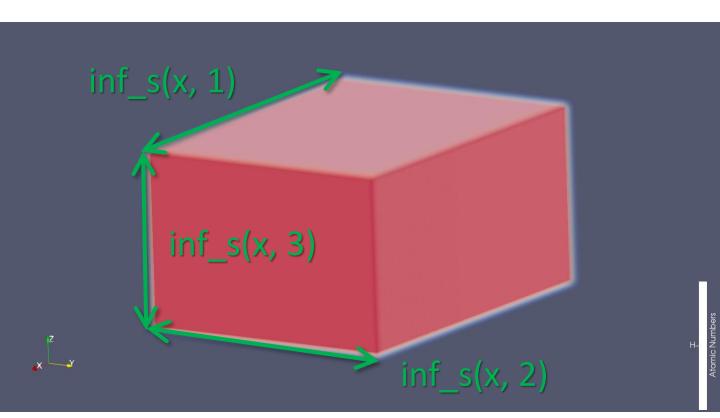
The origin is located on the center of the shape. (The origin on the xy-plane is located on the center of the triangle)

typ_s(x) = 'rectangular-cylinder'

inf_s(x, 1): Side length along x-axis.

inf_s(x, 2): Side length along y-axis.

 $\inf_{x}(x, 3)$: Side length along z-axis.



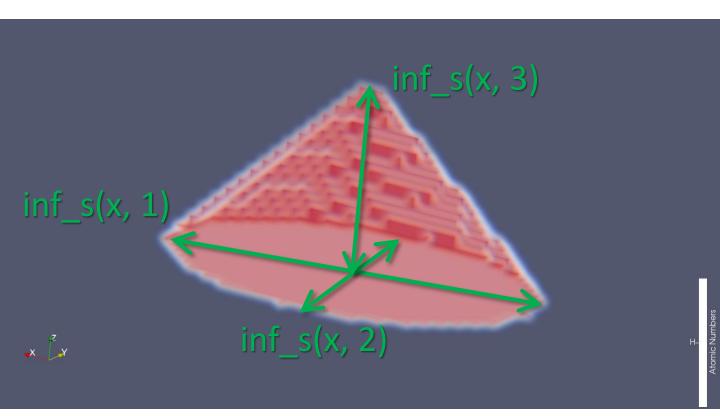
The origin is located on the center of the shape.

typ_s(x) = 'elliptic-cone'

inf_s(x, 1): Diameter along x-axis.

inf_s(x, 2): Diameter along y-axis.

 $\inf_{x}(x, 3)$: Height along z-axis.



The origin along the z axis located below the shape.

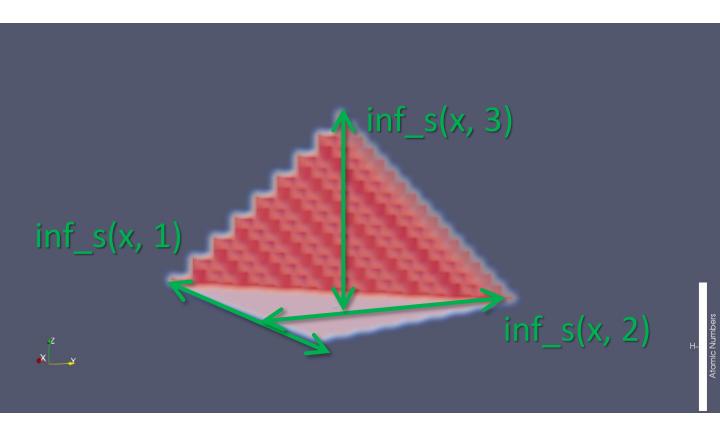
(The origin on the xy-plane is located on the center of the ellipsoid)

typ_s(x) = 'triangular-cone'

inf_s(x, 1): Side length along x-axis.

inf_s(x, 2): Height along y-axis.

inf_s(x, 3): Height along z-axis.



The origin along the z axis located below the shape.

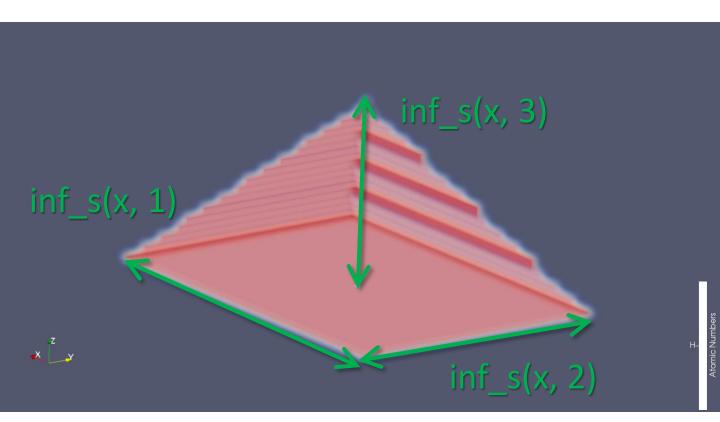
(The origin on the xy-plane is located on the center of the triangle)

typ_s(x) = 'rectangular-cone'

inf_s(x, 1) : Side length along x-axis.

inf_s(x, 2): Side length along y-axis.

 $\inf_{s}(x, 3)$: Height along z-axis.



The origin along the z axis located below the shape.

(The origin on the xy-plane is located on the center of the rectangle)